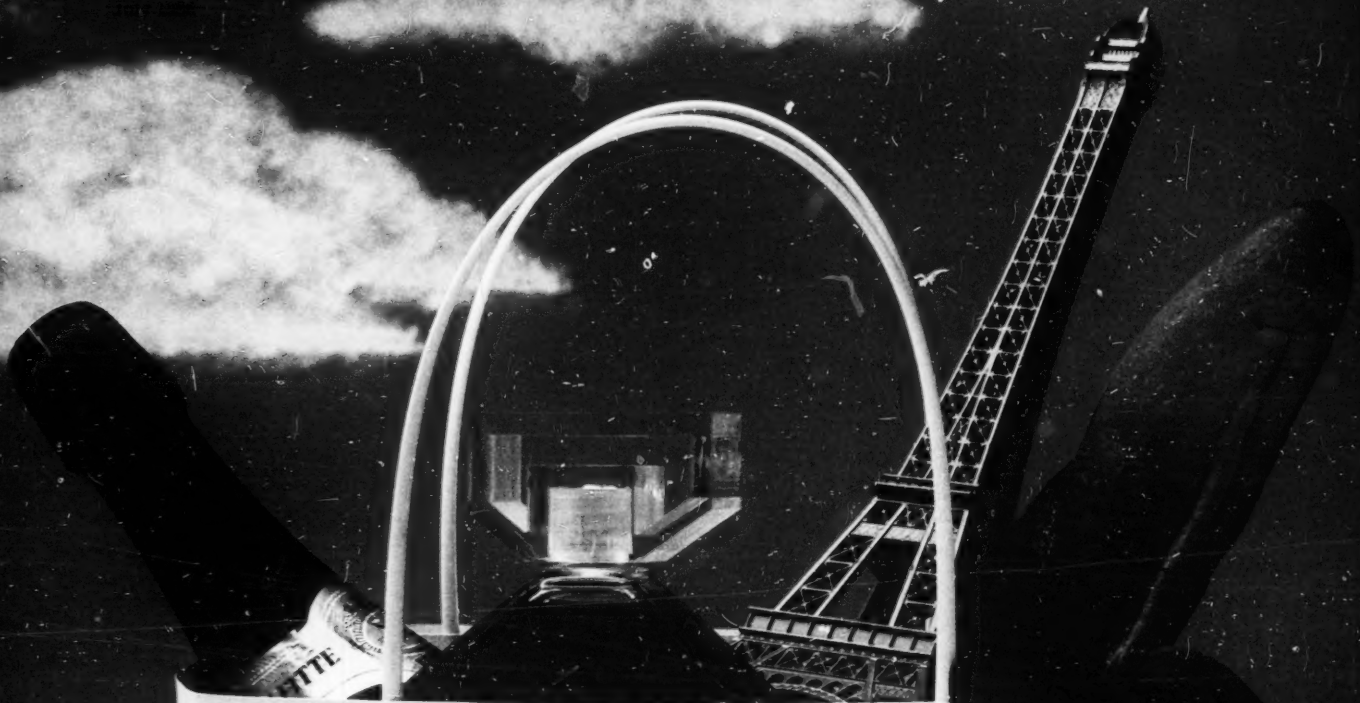


10/21/86 C5150-4

Chain Store Age **EXECUTIVE**

with Shopping Center Age

The new magazine for retail management



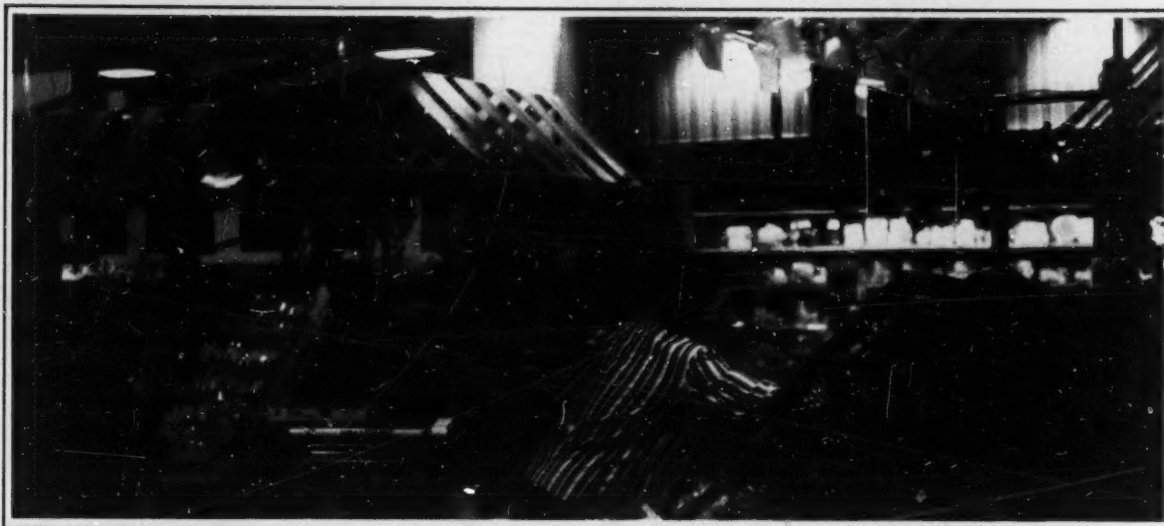
**Retailing
in France:**

Ooo-la-la!!



DOLLARS A YEAR (USA)

CONTENTS



RETAILING IN FRANCE: OOO-LA-LA!!!

While the hypermarkets continue as France's strongest retail force, their dominance is waning. Innovative supermarkets are competing with them in food merchandising, while savvy specialists are impacting sales in other categories. At the same time, Carrefour, the nation's largest hypermarket, is changing its own competitive strategy. 11



MARKETING: PROMOTIONAL MAGIC IS IN THE BAG

Retailers have said goodbye to the old plain brown wrappers. Instead they are using shopping bags as effective merchandising tools. 94

In My View	5
Perspectives	9
On the Level	75
Advertising Index	105
SPECS Forum	106

DEPARTMENTS

Retail Census: An analysis of the average costs per square foot and life-spans of physical support materials is included in this annual research study by *Chain Store Age Executive*. Areas investigated include signage, fixtures, roofing, ceilings, flooring, floor maintenance, security, interior lighting, HVAC, energy management and solid waste management. 25

Finance: Pension funds are proving to be cash cows for retailers. . . 81

Legislative Affairs: Government sources have been issuing sharply differing verdicts on the legality of so-called "gray market" merchandise. 82

Retail Technology: Despite conflict surrounding their use, subliminal messages aimed at deterring shoplifters are being heard in a growing number of stores. 85

Physical Supports: Automatic doors are growing in acceptance among retailers. 98

SHOPPING CENTER AGE



SHOPPERS REDISCOVER SMALL CENTERS

Time-pressured consumers enjoy the convenience of fulfilling most of their shopping needs close to home. As a result, of the 2,171 centers opened in 1985, 1,831 were neighborhood centers, 322 were community-sized centers, according to International Council of Shopping Centers. . 69

RETAIL CENSUS

RESEARCH STUDY: PROOF OF RISING STORE COSTS

PRICE TAGS FOR MATERIALS USED TO BUILD STORES KEEP CLIMBING

Want to build a store? If the answer is yes, be prepared to spend a substantial amount of money.

For example, if a new department store is being planned, it's likely to be in the vicinity of 117,000 sq. ft. in size. Costs per square foot just for erecting the store shell will be about \$31.00 per square foot. The bill so far: \$3.6 million.

Then there's lighting, an investment of approximately \$1.42 per square foot; fixturing, around \$9.30 per square foot; and signage, adding another 21¢ per square foot to the bill. And the tally keeps on climbing.

Or consider another example. The tab for erecting the store shell for a 38,400-sq.-ft. home center (the average size of those built in the last year) comes to approximately \$963,800,

based on an average square foot cost of \$25.10. And, again, that's before all the accoutrements are added.

The numbers used in these examples are not arbitrary figures. Rather, they are taken from the data collected by *Chain Store Age Executive* in its Annual Retail Census.

The purpose of this census is to amass information on the average cost per square foot and average lifespan of the physical materials that combine to create the store building and contribute to the store esthetics.

Specific materials analyzed include: interior signage; fixtures; interior lighting; flooring; floor maintenance; security; ceilings, roofing; HVAC; energy management and solid waste management.

The analysis includes a breakout of the average cost per square foot paid

for these materials by each of the six major retail classifications. An average retail industry cost and lifespan for each physical support material studied is also included.

In addition, the census includes estimates of the average square footage of both existing stores and those built in the last 12 months to show the impact of these costs on capital expenditures.

While stores in some retail classifications are getting larger, others are getting smaller. But no matter which direction they are moving in, retailers are clearly devoting as much space as possible to the actual selling floor (see accompanying charts). The reason is simple: productivity must improve to cover increased costs—including those of actually constructing the stores. ■

Store sizes: Going up and going down

Apparel Specialty
Existing stores: Mean: 16,500 sq. ft.
Amount of selling space available in typical store: Mean: 13,290 sq. ft.
Size of stores opened in 1985-86: Mean: 16,900 sq. ft.
Amount of selling space available in stores opened in 1985-86: Mean: 14,221 sq. ft.
Cost to erect a building shell within last 12 months: Mean: \$26.20
Source: Chain Store Age Executive research

Supermarket
Existing stores: Mean: 30,070 sq. ft.
Amount of selling space available in typical store: Mean: 22,240 sq. ft.
Size of stores opened in 1985-86: Mean: 40,940 sq. ft.
Amount of selling space available in stores opened in 1985-86: Mean: 30,950 sq. ft.
Cost to erect a building shell within last 12 months: Mean: \$33.10
Source: Chain Store Age Executive research

Home Center
Existing stores: Mean: 27,640 sq. ft.
Amount of selling space available in typical store: Mean: 21,725 sq. ft.
Size of stores opened in 1985-86: Mean: 38,460 sq. ft.
Amount of selling space available in stores opened in 1985-86: Mean: 30,680 sq. ft.
Cost to erect a building shell within last 12 months: Mean: \$25.10
Source: Chain Store Age Executive research

Drug
Existing stores: Mean: 12,450 sq. ft.
Amount of selling space available in typical store: Mean: 10,184 sq. ft.
Size of stores opened in 1985-86: Mean: 13,460 sq. ft.
Amount of selling space available in stores opened in 1985-86: Mean: 10,930 sq. ft.
Cost to erect a building shell within last 12 months: Mean: \$28.00
Source: Chain Store Age Executive research

Department
Existing stores: Mean: 128,820 sq. ft.
Amount of selling space available in typical store: Mean: 103,867 sq. ft.
Size of stores opened in 1985-86: Mean: 117,250 sq. ft.
Amount of selling space available in stores opened in 1985-86: Mean: 95,207 sq. ft.
Cost to erect a building shell within last 12 months: Mean: \$31.10
Source: Chain Store Age Executive research

Discount
Existing stores: Mean: 69,520 sq. ft.
Amount of selling space available in typical store: Mean: 55,685 sq. ft.
Size of stores opened in 1985-86: Mean: 80,140 sq. ft.
Amount of selling space available in stores opened in 1985-86: Mean: 48,235 sq. ft.
Cost to erect a building shell within last 12 months: Mean: \$25.40
Source: Chain Store Age Executive research

STORE PLANNING: THE SIGN AS DESIGN

HUGE PHOTOMURALS HIGHLIGHTING MERCHANDISE GROW IN POPULARITY

When it comes to the use of interior signage, retailers are pulling out all stops to add to the ambience of their stores and to help direct customers.

Among the various devices being used are use of huge photomurals, both backlit and nonlighted, theatrical neon lights, banners containing symbolic drawings or photographs to identify the products, fiber optics, animated signs, illuminated aisle markers, nonlit product information signage and even clerks wearing cos-

tumes or uniforms depicting particular product categories.

One thing is for sure. Interior signage definitely plays an important role in the overall design of a store. Selecting the colors, materials, textures, woods as well as the location of the signs are no longer based on whimsy. The location and material of each sign usually has been determined with a definite purpose in mind.

Still, there is a growing number of retailers who believe that the role of signage is diminishing and that, in-

stead, the merchandise should simply sell itself.

Exponents of this philosophy point to chains such as The Limited where the vibrant colors of the clothes displayed reportedly are enough to stop the customers in their tracks.

Likewise, The Gap relies heavily on the merchandise, rather than signage or background displays, to make the sale.

Still another example is Esprit, with its vast stores highlighting various lines of colorful sportswear and related accessories. However, it also uses huge photomurals (*Chain Store Age Executive*, June 1986) of women wearing Esprit's apparel.

The growing use of photomurals is good news to a large group of store planners who still believe that signage should be an integral part of store design.

The use of photomurals continues to grow most effectively in supermarkets. Ralphs, Federated Department Stores' supermarket division, and Safeway are only two of the supermarket chains which use photomurals extensively to direct customers to various product departments and to make the products more appetizing.

Supermarkets, in particular, show enormous creativity in their use of signage. The most well known example is A&P's FutureStore with a typical unit that follows this format using over 250 black and white "pictograms" in various sizes throughout the store. These strong graphic symbols are particularly effective in promoting customer ease of shopping and in helping the customers either to plan their shopping trips around the store or to shop spontaneously and to remember items they may have forgotten.

A major use of interior signage is to direct consumers to the department of their choice within a store. Meijers of Grand Rapids, for instance, uses large-scale graphics to mark major departments, such as pharmacy, meat, service counter, apparel and sporting goods.

One chain has experimented with mammoth store maps in some stores, but has dropped these maps in subsequent stores because it was just too difficult to keep up to date with all the departmental changes.

Cub Food, a division of SuperValu

Cost per square foot for interior signage

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
Less than \$0.10	29	30	17	20	53	30	27
\$0.10-\$0.14	14	20	17	10	13	7	20
\$0.15-\$0.25	21	23	17	17	13	37	20
\$0.26-\$0.50	9	13	10	20	—	10	—
\$0.51-\$0.75	6	—	13	7	3	7	3
\$0.75-\$1.00	5	—	7	7	7	3	7
\$1.01-\$2.00	7	7	10	10	3	3	10
\$2.00+	3	—	3	3	—	—	10
Don't have interior signage	3	—	3	3	3	3	3
Individual store handles	1	3	—	—	—	—	—
Contract to outside service	1	—	3	—	—	—	—
Don't know/no answer	2	3	—	3	3	—	—
MEAN	(\$0.39)	(\$0.25)	(\$0.51)	(\$0.50)	(\$0.21)	(\$0.26)	(\$0.58)

Source: Chain Store Age Executive research

Lifespan for interior signage

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
2 years or less	17	10	3	7	30	27	23
3-4 years	5	3	3	3	3	10	3
5 years	23	27	27	23	23	20	17
6-9 years	20	17	37	33	10	13	10
10 years	18	23	20	17	7	20	20
More than 14 years	3	3	3	7	3	3	7
Lifetime/permanent	4	10	—	3	7	3	3
As needed/required	2	3	3	3	3	—	—
Don't know/no answer	4	3	—	—	10	—	13
Don't have interior signage	3	—	3	3	3	3	3
(MEAN-years)	(6.4)	(6.9)	(7.3)	(7.5)	(4.6)	(5.7)	(6.3)

Source: Chain Store Age Executive research

RETAIL CENSUS

Stores, Minneapolis, uses green and orange signage throughout the stores. Included are signs resembling hanging sheets on which painted lettering identifies the different departments. Wooden three dimensional lettering is used on some walls to identify other departments, such as deli, meat and fish. In the aisles, Cub uses wooden markers to show the locations of different sections within a major department, such as chicken or beef within the meat department.

At Rick's Pick 'N Save, Columbus, Wis., pastel banners with drawings imprinted on them are hung over each section of the store. These designate the merchandise to be found in that particular department. Over the dairy case, for example, there are banners with drawings of cows. Over the produce department there are banners with fruits and vegetables.

Bigg's first hypermarket in Cincinnati combines food with such general merchandise lines as apparel, health & beauty aids, consumer electronics and home furnishings. Because of its large size—123,000 sq. ft.—considerable attention was paid to making sure that all signage and graphics easily direct customers through the store to the departments they are seeking.

In Bigg's wine department, for instance, signs above the various racks tell shoppers what countries or areas the various wines are from. Above the center aisle are banners with pictures of fish, fowl and meat to tell the hesitant shopper what wine goes with what meal.

The chain utilizes a combination of illuminated aisle markers and nonlit product information signage. The layout of the store has food around the perimeter and nonfoods in the center. Thus, the back wall of the store—meat, seafood and a bakery—includes overscaled photomurals which show the products being sold in the various departments. Customers entering the huge store can see at a glance from the doorway where they want to go.

A home center, T. W. Perry, Gaithersburg, Md., relies, in part, on its red and black color scheme to appeal to its female customers. But tied to this color scheme are the signs that hang in each section of the store which identify the various departments. To soften the effect of the stark black and red colors, the store incorporated wood around the signs in the gift/housewares section, as well as in the signs hanging over the six check-out counters.

These signs provide the shoppers with a general idea as to what products she will find in each area. This is in contrast to numbering various aisles as do most supermarkets.

Still another device being used by retailers is neon signage. Coming in a wide assortment of glitzy colors, such signs loudly proclaim the location of various departments and merchandise categories.

New York-based Bloomingdale's, another division of Federated Department Stores, is a good example of the use of "jazzy" signage. A bright white Coca-Cola neon light on a red background beckons shoppers into one of its Coca-Cola apparel sections.

Long known for its departments that appear and disappear as quickly as a weekend, Bloomingdale's currently has a Miss Liberty shop on its second floor selling memorabilia for the 100th anniversary of the Statue of Liberty. The sign above the shop is strictly show business: The neon sign has "Miss" in red and "Liberty" in blue. This is all on a white background surrounded by a red border and blinking white lights. Shoppers getting off the escalator are attracted to it like a magnet.

Fiber optics signs that create constantly moving, colored displays and create excitement also are being used.

FIXTURES AS CUSTOMER LURES ZAYRE'S "LOOK" DRAWS SHOPPERS' ATTENTION

In the past, many retailers thought it best to select fixtures that virtually blended into their overall decor and, in turn, focused consumers' attention strictly on the merchandise at hand.

However, more and more chains seem to be discovering that such equipment can actually be configured so that it not only creates a very distinctive store "look," but, just as important, serves as a rather effective customer "lure."

Consider, for instance, the case of Zayre Corp., which has installed grid wire merchandising "towers" in the children's departments of its 345 discount outlets. According to fixture design manager Sandra Thompson, the units' triangular shape breaks up the shopper's line of vision and creates an important focal point in the

aisles.

"We have decided that in a majority of cases, we can no longer show long, uninterrupted lines of fixtures completely hidden by heaps of goods," she says. "There's too much competition for people's business out there to do that any more."

"Instead, we're moving toward fixtures that play a role in selling what we're featuring—ones that grab customers, give them the message that one department here is different from the next and, consequently, bait them over for a sale."

Thompson also believes that the white color chosen for the grid wire stands out enough to catch the eyes of most passers-by, but is not so bright as to overpower the goods.

The towers' H-framed outline, combined with their distinctive, yet

Cost per square foot for fixtures

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
Less than \$3.00	17	27	17	7	3	27	20
\$3.00-\$9.00	32	23	47	26	23	43	27
\$9.01-\$12.00	16	20	23	7	13	7	23
\$12.01-\$15.00	13	17	7	7	20	10	20
\$15.01-\$18.00	3	3	3	3	3	7	—
More than \$18.00	10	7	3	53	27	3	3
Individual store handles	1	3	—	—	—	—	—
Don't know/no answer	2	—	—	2	—	3	7
MEAN	(\$7.50)	(\$6.43)	(\$5.78)	(\$11.57)	(\$9.37)	(\$5.52)	(\$6.30)

Source: Chain Store Age Executive research

RETAIL CENSUS

subtle coloration, permits Zayre to "strike the perfect balance between inventory and presentation," she asserts.

Similarly, the planogramming manager for an East Coast apparel chain reports that the walls in one of his company's new store prototypes

pick out an area that strikes their fancy."

As the chain has never tried this approach before, it intends to experiment with the grids on a limited basis in one new branch and one retrofit for a trial period lasting approximately six months. Store personnel have

erally come over to them right away instead of hesitating," she says. "The natural steel color of the fixtures is perfectly fine, but the material makes them just a bit more exciting to most people and is a good shopping stimulant."

What's more, Slight points out, the gondolas in Best's newer showrooms are also being coated with custom-prepared paint in a whitish-beige shade that complements the fabric without detracting from the stores' inventory.

"We don't think the material would be as eye-catching without the paint," she observes. "Our feeling is that it would overpower it too much. The beige adds just the right touch."

In another, yet related vein, one off-price chain is trying out a newly-developed pallet rack adaptation to achieve a warehouse-type look and encourage shoppers to peruse its shelves more thoroughly. The set-up involves lining both sides of every aisle with standard gondola runs joined by overhead bridges. Each bridge has the capacity to hold two large pallet loads.

"Before we brought in this modification, all extra stock was kept in the back," remarks the chain's project manager.

"Therefore, although we are really a warehouse operation, we didn't really present that impression and, as a result, customers didn't pick over the displays as they should in a bargain-type situation."

However, he claims, the tides have turned since the pallet racks appeared in the stores. This is chiefly because "with the goods looking the way they do and appearing in such bulk, one can't help but be drawn toward scrutinizing available stock more closely."

Yet while many chains are obviously paying more attention to esthetics when it comes to buying and setting up display fixtures, some retailers contacted by *Chain Store Age Executive* say that they're still devoting an equal measure of thought to "maximizing the cube" or, in other words, utilizing available sales space most effectively. Toward that end, they are bringing in fixtures that take up less room, yet hold a much greater volume of inventory.

For example, one drug chain has replaced traditional tables used to hold sale items with round pinwheel fixtures. The company's director of store planning estimates that the pinwheels hold twice as much merchan-

Lifespan for fixtures

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
4 years or less	7	—	—	—	17	10	13
5 years	14	7	7	3	20	23	23
6-9 years	15	13	7	30	13	7	20
10 years	24	27	33	37	23	19	17
12 years	3	13	—	—	3	—	—
15 years	16	17	30	13	13	20	3
20 years	11	13	23	17	3	10	—
More than 20 years	2	—	—	—	—	10	—
Lifetime/permanent	3	3	—	—	3	10	3
As needed/required	1	3	—	—	—	—	—
Don't know/no answer	4	3	—	—	3	—	20
(MEAN-years)	(10.9)	(12.0)	(13.4)	(11.4)	(6.5)	(12.6)	(6.5)

Source: Chain Store Age Executive research

Types of fixtures used

	Total %	Discount %	Department %	Apparel Specialty %
Small racks for accessories	82	60	97	90
Large racks for apparel	89	77	97	93
Showcases	81	90	93	60
Glass cubes	78	47	97	57
Gondolas	71	93	73	47
All other mentions	8	3	7	13

Source: Chain Store Age Executive research

have been fitted with 12-ft.-high steel grid panels designed to highlight some of its most recent blouse arrivals. Company principals hope that the fixtures' height and sheen will draw shoppers' eyes upward toward the tops of its other displays, she notes.

"Before we designed this particular prototype, we noticed that customers sometimes got lost in our merchandise," he explains. "Our racks and cube units were perfectly adequate, and still are, but none of the fixtures stuck out enough to send people directly to the kinds of items they were looking for. With the grids in place, though, it is likely that people will first turn their heads toward the ceiling and when they do, become able to

been asked to observe shoppers' reaction to the panels in order to determine whether they are indeed acting as principals have projected. Should their prediction prove correct, the company will acquire identical grids for its other locations.

Also placing an emphasis on fixtures that serve as customer bait is 214-unit Best Products, adds Dena Slight, assistant manager of showroom planning. In Best's most recently opened catalog showrooms, she states, brightly colored fabric-covered brackets are being applied to gondola shelves as a means of spotlighting the merchandise contained there.

"Since the material makes the gondolas really stand out, customers gen-

dise as the tables, yet occupy only half as much floor space.

"With the tables, we had to place everything in low piles so it wouldn't start to topple," he asserts. "And, since there were always plenty of promotional items, we needed plenty of tables to do it on."

"Basically, we were merchandising wide and shallow, which, of course, is a real waste of space."

Conversely, he states, the deep pockets featured on the pinwheels allow store personnel to position a large volume of items atop each other for the sake of practicality.

"The deeper the piles, the narrower the room needed to accommodate them and the more efficient we become," he points out. "We are so pleased with the change that we're considering the idea of putting pinwheels in our 'power aisles,' where things are getting more crowded daily and selling space is really, really at a premium."

At Zayre, comparable results are being achieved with adjustable boxer racks installed in some stores this past Jan. 1. The equipment appears in the ladies' sportswear, men's and children's departments.

According to Thompson, the new fixtures are more efficient than Zayre's old 5-ft. feature racks in that they can be configured in a variety of ways.

"The feature racks allowed only for sleeve-outs," she elaborates. "On the other hand, the boxers let us put together triple-tier straight faceouts and waterfalls, with tandem racks if we want them, in about the same amount of room as a plain 5-ft. rack. This means inventory spends less time gathering dust in the stockroom and more time out on the floor, too."

Finally, a Midwestern drug chain has replaced many of its 5-ft.-high systems with 8-ft.-high models.

"This is a move to eliminate the crowding that now exists in our stock rooms," states the store planner.

"No matter how many feet across your gondolas run, you waste valuable wall space when they don't extend all that high up all four of your walls."

"Since we can't make the storage spaces any bigger and the walls above the 5-ft. level aren't being used in any kind of decorative way, we decided to make the best of our situation by expanding storage vertically."

"If the 8-ft.-high units work out, maybe we'll go even higher—perhaps to 12 ft."

NEW MATERIALS ADD FLEXIBILITY REROOFING SYSTEMS REFLECT CHANGING ATTITUDES

After many years of only paying lip service to the idea of changing from traditional built-up roofs (BURs) to some of the newer reroofing systems, retailers are now finally risking new materials.

Metal roofs are even being used for entire shopping centers. For example, Robert Greenlaw, president for Peco Construction, a Texas shopping mall developer, is now using a Vul-

tage, a great cost savings.

As James Landrum, sales manager for Vulcraft, explains, the reason for the cost savings is due to the simplicity of the roof. It is a single membrane system and does not need a heavy gauge roof deck to support it, unlike single-ply or BURs. It is light weight and allows the building designer to use lighter design loads.

This is what allows for the decrease

Types of roofing used

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %
PRE-SELECTED						
Single-ply membrane	38	60	40	43	53	33
BUR	46	40	57	63	70	47
Metal	19	17	23	7	7	60
Fabric	8	7	10	7	7	20
SPONTANEOUSLY MENTIONED						
Rubber	4	7	—	17	3	—
All other mentions	2	3	—	—	7	—
Don't know/no answer	4	7	13	—	7	3

Source: Chain Store Age Executive research

Cost per square foot for roofing

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %
Less than \$0.50	5	—	10	3	3	10
\$0.50-\$1.00	10	20	10	10	7	3
\$1.01-\$2.50	47	47	43	40	57	47
\$2.51-\$5.00	24	13	17	40	23	27
More than \$5.00	3	—	—	7	3	7
Individual store handles	5	3	13	—	3	3
Contract to outside service	1	3	—	—	—	—
Don't know/no answer	5	13	7	—	3	3
(MEAN)	(\$2.24)	(\$1.83)	(\$1.85)	(\$2.68)	(\$2.28)	(\$2.43)

Source: Chain Store Age Executive research

craft standing seam metal roof system for all of his shopping centers.

Up until 1984 he used only three-ply BURs on his centers. However, he reports, "Whenever it rained, we always had a leakage problem and repairing a leak with a BUR is a hit or miss operation."

Although the metal roofs allowed Greenlaw to alleviate the leakage problems, it also had another advan-

in cost. With BUR or Ethylene-Propylene-Diene-Monomer (EPDM), a common rubber material used in single-ply roof applications, there needs to be a structural deck. This is where the savings comes in. Vulcraft is a deck and a roof in one.

The actual cost for a 60,000 sq. ft. strip center using the metal roof is \$1.33 per square foot, says Greenlaw. He estimates that this is about a \$2

RETAIL CENSUS

Lifespan for roofing

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %
Less than 10 years	5	—	3	10	7	7
10 years	17	13	13	20	17	20
12 years	3	3	3	3	3	3
15 years	30	37	27	37	23	27
20 years	32	30	40	30	43	17
More than 20 years	5	3	—	—	7	17
Lifetime/permanent	1	—	—	—	—	7
Handled by mall or outside supplier	1	3	3	—	—	—
As needed/required	1	3	—	—	—	—
Don't know/no answer	3	3	10	—	—	—
Was never replaced	1	3	—	—	—	—
(MEAN-years)	(15.8)	(16.2)	(15.9)	(14.6)	(16.3)	(16.0)

Source: Chain Store Age Executive research

per square foot savings as compared with using an EPDM single-ply roof.

While metal roofs may be an appropriate product for Greenlaw and other developers, the National Roofing Contractors Association's (NRCA) 1985 Industry Survey Findings show that single-ply roofs have 52% of the commercial/industrial market.

Citing the NRCA's recent study, Robert Nicholl, manager of marketing communications for J. P. Stevens, manufacturer of single-ply roofs, says, "This is a significant change as compared to last year."

Although product developers at Stevens have not recently introduced a new single-ply roof material, they have been offering a new method for heat welding their Hi-Tuff reinforced white Hypalon roofing system.

Sandwiched in between two layers of the Hypalon (a rubber polymer made by Du Pont) is a loosely woven fabric that acts as a membrane.

Because the roof system requires seam welding to fasten the sheets to one another where they overlap, Nicholl says, "I see a trend in the advancement of roof top seam welding. All single-ply sheets can only be made so long. They have to be welded at the seams to make them watertight."

In order to improve upon the technique that is commonly performed by a person who operates the welder, RoofWare Inc. has developed CompuWelder, a computer-operated welding system that can only be used with Stevens' product.

The computer welding system removes almost all chance for human

error in the welding process. "There is an infrared sensor built into the welding machine that uses a computer to sense the temperature of the machine at the point of the weld."

CEILING DESIGN IS LOOKING UP OVERHEAD DECOR ADDS TO OVERALL IMAGE

How often does a customer walk into a store and immediately look toward the ceiling? Probably not very often, but she's probably missing out on some very interesting design techniques.

More retailers today are banking on the fact that their ceilings will be

At Sears, Roebuck, Donald Friedel, senior project manager for the chain, says he has just begun using the CompuWelder.

Mechanically fastening a layer of single-ply material to a building involves laying down a sheet of EPDM and then screwing or nailing the sheet to the deck. This process is repeated each time a new sheet is put down.

Fastening a roof mechanically results in less weight than when it's ballasted. A square foot of mechanically attached roof is about ½ lb. as compared to 10 lb. for a square foot of ballasted. The ballast (a form of gravel) causes the great amount of weight.

"We are just beginning to look at mechanically fastened single-ply roofs for our buildings," says Thomas Biuso, architectural planning manager for J. C. Penney.

"A mechanical fastening method is a more positive way of fastening. With a ballasted roof, you have to increase the framing of the building in order to accommodate for the heaviness of the ballast," he says. ■

noticed by customers—and be appreciated as more than just hiding the heating, ventilation and air-conditioning equipment.

"There is a lot to be said about the intricacy of ceilings," says William Speer, manager of store design for J. C. Penney, adding that, "If you try

Lifespan for ceilings

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
Less than 10 years	12	3	17	13	13	20	7
10 years	24	23	23	33	10	23	30
11-14 years	3	—	7	7	3	—	3
15 years	17	13	30	17	17	13	10
16-19 years	1	—	—	3	—	—	—
20 years	15	20	13	13	27	13	3
More than 20 years	5	7	—	—	13	—	10
Don't have ceilings	6	7	—	3	—	17	7
Lifetime/permanent	13	23	10	7	13	10	13
Was never replaced	1	3	—	3	—	—	—
Just recently installed	1	—	—	—	—	3	—
Don't know/no answer	3	—	—	—	3	—	17
(MEAN-years)	(14.0)	(15.2)	(12.8)	(12.4)	(18.0)	(11.5)	(14.2)

Source: Chain Store Age Executive research

RETAIL CENSUS

Cost per square foot for ceilings

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
Less than \$0.50	12	13	28	3	23	23	13
\$0.50-\$1.00	32	40	45	40	27	23	20
\$1.01-\$2.50	30	23	20	50	53	30	37
\$2.51-\$5.00	8	10	3	—	17	3	17
More than \$5.00	2	3	—	—	3	3	3
Contract to outside service	1	—	—	3	—	—	—
Don't have ceilings	6	7	—	3	—	17	7
Individual store handles	2	—	7	—	—	—	3
Don't know/no answer	2	3	—	—	—	10	—
(MEAN)	(\$1.48)	(\$1.48)	(\$1.07)	(\$1.27)	(\$1.96)	(\$1.24)	(\$1.83)

Source: Chain Store Age Executive research

Types of ceilings used

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
2x4 ft. lay in panels	72	63	90	63	63	63	67
Acoustical	16	7	13	20	37	—	30
12x12 exposed truss	7	7	—	7	23	3	3
2x2 ft. lay in panels	25	3	13	20	57	17	40
Plaster	11	2	10	3	23	3	23
Regular 2x4 ft. lay in panels	12	—	3	13	23	3	27
Regular 2x2 ft. lay in panels	9	—	—	10	17	—	30
All other mentions	12	3	3	10	27	13	13

Source: Chain Store Age Executive research

to do a total design package and put in a cheap ceiling, it will not add up to the effect you are trying to create."

J. C. Penney is working to have the ceilings be consistent with its design theme which is less decorative than some other chains.

As a result, much of their experimentation with ceiling design is limited to raising or lowering the grade.

As retailers realize the psychological impact of color—a way to make the shopping experience more pleasant for the consumer—more are opting for color ceilings.

"Before we used white ceilings. Now we have gone with tinted [panels]. It warms the atmosphere," says David McCaulou, president of McCaulou's, a California-based specialty department store.

The color (manila) that McCaulou chose for his chain is not a drastic deviation from white, but he did not want a deeper hue because the stores

would appear to be too dark.

Connie Peterson, product manager for fabric specialty ceilings for U. S. Gypsum, says: "We are using more color to direct the consumer

through the changes in the store's departments. As the ceiling color changes, the department changes."

Max Zanoni, designer for Jon Greenberg & Associates, agrees. Having used color panels in both Crowley's and Winkelman's, he says, "Retailers are seeing the ceiling as the largest [area] in the store. If you want to make an architectural statement, the ceiling is where to do it."

The decor of Crowley's is gray, so, in order to tie the ceiling into the total design package, Zanoni chose a gray hue.

Instead of a plain face, the series consists of five different ceiling patterns. Each panel in the series is 2 ft. by 4 ft. but because of the differing etched designs, they do not have the traditional panel appearance. Zanoni estimates that the cost of each panel installed is about 35¢ more than a traditional 2 ft. by 4 ft. panel.

However, other retail chains, such as Roundy's (a Wisconsin-based supermarket chain), use the overhead area to make a more dramatic design statement.

Gary Zmuda, manager of engineering for the supermarket, says, "Most of our stores are ceilingless. All you see are the bare joists. These exposed ceilings give a feeling of spaciousness," he says.

Aside from a design technique, the exposed ceilings are a money saver. "We save between 20% and 30% compared to what it would cost us for a lay-in ceiling," Zmuda says.

"A lot of retailers . . . are having to compete for the customer on things other than price points so they . . . are having to put together an interior decor package," says Carl Schmidt, director of marketing for Integrated Ceilings. ■

TOP FLOOR PRIORITY: DURABILITY CONCEALING EFFECTS OF WEAR A MAJOR FACTOR

When retailers select from among various flooring options, their prime criterion appears to be how well the material will disguise dirt, dust, scuff marks and other signs of wear.

For instance, when Claire's Boutiques opted to upgrade the floor covering used in its units, James Saum, director-store planning and construction, sought out "tone-on-tone" carpet dyed in varying degrees of a single shade. After careful consideration, he

eventually settled upon what he terms "a mixture of light and dark brown fibers with a pin dot-type appearance."

"We had been installing a mauve material but it just didn't hide the stains sufficiently," he says. "Its monochromatic nature made every blemish stand out. We decided that if we were going to spend \$15 per square yard on high-quality carpet, which we were prepared to do in order to give our stores a more upscale

RETAIL CENSUS

Types of flooring used

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
VAT	84	88	47	88	88	87	87
Carpet	57	88	33	28	100	37	100
Vinyl	35	33	38	48	58	37	38
Concrete	31	33	7	48	37	58	17
Quarry tile	37	38	23	58	58	13	48
Hardwood	18	3	—	3	73	7	23
Terrazzo	17	3	27	38	38	7	13
Marble	8	—	3	—	33	—	—

Source: Chain Store Age Executive research

Lifespan for flooring

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
4 years or less	4	—	—	—	7	13	3
5 years	13	3	7	3	23	18	38
6-8 years	24	23	13	38	48	7	38
10 years	27	27	37	37	17	27	17
11-14 years	2	3	3	7	—	—	—
15 years	13	28	28	13	—	23	3
20 years	7	17	13	3	3	7	—
More than 20 years	8	—	8	3	7	18	3
Lifetime/permanent	2	3	—	3	—	3	—
Don't know/no answer	3	3	—	—	3	—	13
(MEAN-years)	(11.7)	(12.8)	(13.3)	(12.6)	(18.5)	(13.7)	(8.7)

Source: Chain Store Age Executive research

atmosphere, whatever we bought would have to hold up to plenty of abuse without showing it."

Specifically, he decided to buy a carpet with more than one color in it so soil would blend in easily. Similar considerations were behind J. C. Penney's installation of "flecked" pile in several new and renovated units, according to William Judge, design development manager. The speckled effect is achieved during the manufacturing process, when some of the carpet's darker fiber ends are looped underneath the lighter ones.

"This carpet is intended for our clothing and home furnishings departments," Judge notes. "Because these areas are so popular, our first priority is to keep them in top-notch shape, which means having surfaces that disguise, not emphasize dirt."

Because of the new options now available, even some supermarkets are experimenting with carpet installations. For example, the produce aisle of its Mount Pocono, Pa., food

market, A&P chose a basically brown product which, according to planning and design director Richard Sokolnicki, "resembles oatmeal in its overall appearance."

Sokolnicki points out that while A&P's primary goal with the carpet tile experiment is to determine how well it can curb slip-and-fall accidents, the oatmeal color was specified as an auxiliary feature of the test.

"We really want to find out what kind of carpet patterns do the best job of covering up stains," he explains. "Although damaged tiles can be pulled up and either washed or replaced, we feel it's better to find shades that lessen that need."

However, carpet purchasers are not alone in prioritizing stain-hiding properties when shopping for floors. Rather, even chains whose interests lie in hard floor covering are picking up on this trend.

At A&P, for example, synthetic rubber sheet goods may soon be laid down in a number of stores, either in

produce sections alone or throughout each unit. The sheeting contains a wax component that renders scuff marks less obvious. And, when incorporating quarry tiles into an A&P branch in Rehoboth Beach, Del., Sokolnicki saw to it that the material had built-in abrasives that stand up to heel marks.

Similarly, the white vinyl asbestos tile used to highlight Pay Less Drug Stores' cosmetics departments has a brick-type pattern instead of a plainer, smoother surface.

"Despite the fact that white floors get dirty more easily than do darker ones, we need to stick with them because they reflect light upward and make our aisles look bigger," explains G. Boyd Sempel, vp-construction. "The texture was a deliberate choice because it helps mask soil."

Yet, while planners are obviously gravitating toward somewhat practical flooring applications, they are devoting equal attention to devising creative flooring designs.

An example is what has taken place at Houston's Fiesta Markets, where management has created a Houston minimarket prototype featuring a red and white vinyl floor. This matches and highlights its beverage center.

By specifying the red and white surface, interior design firm Pennan Inc., Houston, was "attempting to appeal to the market's largely Hispanic clientele," remarks Pennan staffer Mike Rogers. "We had discerned that Hispanics are comfortable in festive atmospheres, which we believed this particular flooring would help us to connote," he asserts.

Penney has also come up with some innovative applications for hard-surface materials. For example, the housewares department is set off by checkerboard-patterned tile borders in two contrasting colors.

"The edges virtually 'carve' the housewares shops out of the rest of the flooring in a kind of three-dimensional manner," Judge says.

A&P's Kohl Food Stores subsidiary has jumped on the bandwagon as well by outlining some of its checkout counters with bold red zigzag tile against a white background. Additionally, several A&P outlets have installed 2 ft. by 2 ft. gray-on-white or black and white tile borders around their delicatessens in angled patterns that follow the contours of the fixtures within.

According to Sokolnicki, the angles "afford extra visual interest, without generating too much confusion." ■

SOME CHAINS COMBINE FLOOR CARE OPTIONS

WARD'S CMO ENFORCES COMPANY STANDARDS, REDUCES IN-STORE COSTS

In-house cleaning crews or outside janitorial services. There are definite pros and cons no matter which floor care option a retailer chooses.

"Keeping janitorial services in the family may give you better scheduling flexibility, but not as much cleanliness consistency from branch to branch," says the director of maintenance for a discount operation. "On the other hand, contracting jobs out has traditionally been more cost-effective, yet allows less control over how often the work will be done and with what machinery."

However, at least one retail company claims to be enjoying the benefits afforded by both systems. How? By establishing a program whereby it owns its own equipment, but has established its own set of usage standards to insure consistent clean line levels throughout the chain.

That company is 325-unit Mont-

gomery Ward which, in 1984, formed a central maintenance organization (CMO) with the intent of finding a way to enforce company-wide house-cleaning standards while reducing store upkeep expenditures.

According to Larry Green, CMO technical coordinator and sales manager for Montgomery Ward's Standard T chemical manufacturing subsidiary, the program—devised with the help of parent company Mobil Corp.—proved so effective in a test run that by late 1985, it had been implemented in all 325 stores.

Under the chain's previous maintenance, "Individual managers did pretty much what they wanted to when it came to cleaning their units," recalls Green. "In the area of floor care, some stuck to their own staffs and selected machinery themselves; others hired local firms of their choice."

As a consequence, "We had trouble insuring that the floors in all our branches always appeared exactly as we liked them—shiny and scrubbed. It was all too common an occurrence for us to walk into one unit and find its tile and carpets looking perfectly well-kept, while another store in the next town or state seemed not quite up to snuff."

The problem was that "Everything depended on whether particular stores had been able to call in the contractor when necessary, the basic ability of in-house help and the appropriateness of the machinery and materials in use. Even worse, since there was no officially sanctioned floor maintenance plan, cost containment was absolutely out of the question."

To remedy the situation, Montgomery Ward established a CMO comprised of 14 of its own main-

JUST PUBLISHED

Loyalty Marketing™

The Wave of the Future

Learn how to institute and analyze **Frequent Buyer Programs** for all industries. Based on recent research and analysis done for major retail chain. Author reveals experiences with American Express, W.R. Grace, and major ad agencies.

Guarantee: Read it. If you don't think it deserves a spot on your shelf, return it for a prompt refund.

Send: \$4.95 plus \$1.00 for postage and handling to:

Loyalty Marketing
Suite 309 C, 608 Fifth Avenue
New York, N.Y. 10020



proudly announce
the new standard in

DEBIT/CREDIT TERMINALS

encompassing the
entire solution for
POS financial settlement.

For more information circle 21 on reply card.

For more information circle 22 on reply card.

RETAIL CENSUS

nance supervisors, plus 10 technicians from Standard T. The group was assigned to work with Gary Kohut, an engineer/project manager on nine months' loan from Mobil, toward the standardization of in-store house-keeping policies (with a special emphasis to be placed on floor care). Budget for the project, including research, training and equipment acquisition, was set at \$1 million.

Kohut began by conducting a detailed study of all maintenance methods. With the help of a computer, he evaluated the efficiency of individual procedures based on correlations between unit sizes, equipment used and the amount of time needed to clean each site.

"Keeping in mind what individual CMO members had to say about day-to-day operations in particular branches, Gary first determined that the best way for us to achieve floor care consistency was to totally outlaw outside contractors in favor of having our own people perform the job," Green explains. "In his view, Montgomery Ward staffers would be more

Lifespan for flooring maintenance equipment						
	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %
4 years or less	13	13	17	7	13	17
5 years	36	37	33	30	37	43
6-9 years	13	13	18	33	7	—
10 years	14	13	13	13	13	17
12 years	1	—	—	—	3	—
15 years or more	1	—	3	—	—	—
As needed/required	1	3	—	—	—	—
Lifetime/permanent	1	—	—	—	3	3
Handled by outside supplier or mall	12	18	23	3	20	7
Don't know/no answer	8	10	3	10	3	3
Don't have floor maintenance equipment	3	—	—	3	—	10
(MEAN-years)	(6.1)	(6.0)	(6.2)	(6.4)	(6.1)	(5.6)

Source: Chain Store Age Executive research

willing to conform to strict, uniform standards than would various outside firms in the cities where our branches are located."

Once this step had been completed, Kohut and the group worked in tandem to develop a floor maintenance program that could be used in

Be Immortal.

If you could look into the eyes of generations yet to come, you would be there. You can make a difference.

By including the American Cancer Society in your will you can have a powerful effect on those who come after you. And leaving a legacy is a beautiful way to live your life.

AMERICAN CANCER SOCIETY

PIN STRIPE

POS Transaction Terminal Systems



Capture and control electronic commerce.

To arrange your personal PinStripe demonstration, call Don Metzger at

408/433-3300

PinStripe® is a registered trademark of ICOT Corporation, P.O. Box 5143, 3801 Zanker Road, San Jose, CA 95150-5143.

For more information circle 24 on reply card.

RETAIL CENSUS

Cost per square foot for flooring maintenance

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %
Less than \$0.10	37	40	37	37	27	43
\$0.10-\$0.14	9	—	20	17	—	7
\$0.15-\$0.25	14	20	13	7	23	7
\$0.26-\$0.50	10	10	3	17	7	13
\$0.51-\$0.75	5	10	3	—	7	3
\$0.76-\$1.00	3	3	—	—	10	3
\$1.01-\$2.00	1	—	3	—	3	—
\$2.00 +	1	—	—	—	3	—
Don't have floor maintenance equipment	3	—	—	3	—	10
Contract out to outside service/handled by mail	6	—	7	7	7	10
Individual store handles	9	10	13	10	10	3
Don't know/no answer	2	3	—	3	3	—
Refused	1	3	—	—	—	—
(MEAN)	(\$0.24)	(\$0.23)	(\$0.19)	(\$0.15)	— (\$0.44)	(\$0.19)

Source: Chain Store Age Executive research

every Montgomery Ward outlet. To afford maximum efficiency with minimal manpower, they opted to purchase only burnishers, scrubbers and shampooers with high-speed (1,500 rpm-plus) capacities; any existing equipment falling short of that requirement was to be retired. It was also decided that units' hard floors were to be scrubbed and shined up daily; carpets were to be vacuumed at the end of every business day and shampooed at a rate of 5% of store area per evening.

Finally, the 14 supervisors underwent 60 hours of classroom training conducted by Green and his colleagues and attended several "hands-on" workshops. Their curriculum included such topics as utilizing the new equipment to its greatest advantage and dealing with mechanical breakdowns. Just as significantly, they were given what Green terms a "thorough explanation of what we in the corporate sector consider a clean floor—namely, one with few, if any, scuff marks, dust flecks and dirt spots."

By the end of 1984, the chain was ready to test its universal floor maintenance program in 10 Tampa-area stores. According to Green, "it was immediately apparent that we had made the right decision by buying the machines and specifying exactly how they were to be used. The stores stopped looking different; the floors in every one seemed to be in top-notch shape all the time. Even bet-



FLOOR CARE: CONTRACT IT OUT OR KEEP IT IN THE FAMILY?

ter, bringing the maintenance procedures in-house, with the right kind of equipment and just one schedule for employing it, cut the housekeeping budget by 30%.

"Since management was satisfied with these results, we went ahead and instituted the program company-wide; the last branch switched over in April 1985." During the conversion period, janitorial crew captains from each unit took an encapsulated ver-

sion of the CMO training course to acquaint them with the machinery and cleaning timetable.

Aside from the original mandates, Montgomery Ward's floor care system now calls for weekly store inspection visits from the CMO supervisors, who evaluate how well individual sites are conforming to standards and report their findings back to corporate headquarters. Supervisory personnel must take company-run seminars monthly to keep abreast of changing technology, and are asked to share what they learn with individual managers. And, should any manager experience problems with the "marriage" between equipment and chemicals, a team of lab chemists from Standard T is always on hand to suggest the appropriate remedies.

"What we're doing may seem complicated, but it isn't all that difficult once you have the right kind of machines and a real plan for how they should be applied," Green says. "For us, the program is already paying off in savings of about \$10.5 million in the first year of implementation."

However, while Montgomery Ward may be something of a pioneer in new approaches to floor care, it is not the only retail chain currently attempting to make changes in this area. For instance, Jewel Cos. has converted all but five to 10 of its stores from using its own janitorial services to contracting with local firms.

"We tried training employees to clean our stores a certain way but because most of the people doing maintenance were young kids, there was a lot of turnover and never any real consistency in the results," reports Pete Conti, who is in charge of supplies acquisition for the chain.

"Part of the problem also stemmed from the fact that we had no access to technical expertise where floors were concerned, so eventually we did away with the in-house method completely."

Instead, he explains, Jewel has effected a plan whereby outside cleaning companies maintain each of its branches, but only in strict accordance with policies formulated at corporate headquarters.

"Our stores must be serviced an average of four to five days per week, with the chemicals and scrubbing machines provided by us," he notes. "The cleaning firms provide the buffing equipment, which we don't own, and, even more important to us, the expertise we cannot pretend to possess."

EMPLOYERS TAKE FIRM STAND AGAINST SHRINKAGE

RETAILERS SET THEIR SIGHTS ON KEEPING EMPLOYEES' FINGERS OUT OF THE TILL

"People are becoming more cost-conscious [about security systems]... it's not cost effective to play cops and robbers any more," states James Burger, director of loss prevention operations for Saks Fifth Avenue.

Burger's comment reflects the attitude adopted by most retail chains. On one hand, retailers are taking a more hardnosed stance in dealing with shrinkage; yet, on the other, they are seriously questioning the costs of security measures.

"Expenditures [for security sys-

tems] are increasing at a slower rate than in the past," reports Jack L. Hayes, a loss prevention and security consultant, "... however, retailers are getting more aggressive."

According to both Hayes and Burger, the three leading causes of shrinkage today (aside from paperwork errors) are:

- shoplifting;
- employee pilferage;
- credit fraud, the newest and fastest growing form of loss.

"Most people have addressed the external problem [shoplifting]," says

Burger, referring to the widespread installation of anti-shoplifting systems. However, as these systems become the norm, shoplifters are quickly learning ways to beat the system. As a result, the most commonly used devices, EAS, are constantly being refined.

Most recently, manufacturers have started concentrating on radio frequency technology. Radio frequency systems are touted as having higher reliability and a better detection rate than the older magnetic and microwave systems.

"With radio frequency you don't have the problem of the system's detecting things other than the tags," reports William Adams, vp-marketing and planning for CheckPoint. That manufacturer has introduced a radio frequency EAS system utilizing disposable paper tags that can double as price tags.

With systems in place to deter shoplifting, retailers are turning their attention to the area of employee pilferage. For example, it was recently reported that Bloomingdale's is offering an unprecedented \$2,500 reward to any employee who reports a co-worker who is stealing. (Typically, similar rewards total no more than \$100 or \$200.)

"Retailers are now becoming more willing to acknowledge employee theft," says Burger.

At this writing, Saks is readying to implement its Upfront series of video modules designed to address its sales associates on employee theft. Developed with the help of Hayes and Arthur Young Associates, Upfront consists of a half dozen videotapes, each running five to seven minutes.

Topics addressed include the causes and effects of employee theft; the definition of honesty; Saks' commitment to honesty and its responsibility to prevent dishonesty. Following the viewing of each module, employees will be asked to participate in a short discussion session.

"It's tough to get even a half hour with [sales] people for training, so instead we put together a total of 35 minutes' programming," Burger explains. Showing shorter films more frequently, he says, will foster a feeling of continuity; while each module can function on a stand-alone basis, the frequency of viewings will help

Primary security system used

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
PRESELECTED LIST							
EAS	42	40	53	33	43	27	53
Guards	22	27	20	27	33	17	10
Cameras	21	10	27	50	27	3	10
POS software	12	10	10	10	23	13	7
SPONTANEOUSLY MENTIONED							
Employees surveillance	13	13	10	13	—	33	10
Burglar alarms	4	3	3	3	—	7	7
Do not use security systems	4	3	3	—	3	10	7

Source: Chain Store Age Executive research

Cost per square foot for security systems

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
Less than \$0.10	23	37	27	33	10	23	10
\$0.10-\$0.14	13	20	23	3	7	17	7
\$0.15-\$0.25	19	17	23	17	23	7	27
\$0.26-\$0.50	11	10	—	13	20	13	10
\$0.51-\$0.75	5	3	3	7	10	—	7
\$0.76-\$1.00	4	3	7	7	—	—	10
\$1.01-\$2.00	2	—	3	3	3	—	—
\$2.00 +	3	—	—	3	—	10	7
Contract to outside service	2	3	3	—	—	3	—
Don't have security systems	10	—	7	3	13	13	23
Individual store handles	2	—	3	—	7	3	—
Don't know/no answer	6	7	—	10	7	10	—
(MEAN)	(\$0.36)	(\$0.18)	(\$0.25)	(\$0.39)	(\$0.34)	(\$0.49)	(\$0.52)

Source: Chain Store Age Executive research

Lifespan for security systems

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
4 years or less	7	10	7	7	—	13	3
5 years	19	10	27	17	13	30	20
8-9 years	11	13	10	23	6	—	10
10 years	19	17	23	27	20	20	10
15 years	4	7	—	7	10	—	3
More than 15 years	6	13	3	—	13	3	3
Lifetime permanent	9	17	7	7	3	7	13
As needed/required	9	10	10	7	17	10	3
Was recently installed	1	3	3	—	—	—	—
Handled by outside supplier or mail	1	—	—	—	—	3	—
Don't know/no answer	3	—	3	3	3	—	10
Don't have security systems	10	—	7	3	13	13	23
(MEAN-years)	(8.7)	(10.1)	(7.5)	(7.9)	(12.1)	(6.8)	(8.1)

Source: Chain Store Age Executive research

one film reinforce another.

The final module of the series outlines Saks' awards program for reporting shoplifting, employee theft and credit fraud. Although Saks has established a monetary award program, "employees aren't motivated by the money, but rather by the ethics," Burger explains.

"Most people are honest; it's just a small handful who are responsible for employee theft," he says. "And we found that many of these honest people would like to report it when they're aware of another employee's stealing, but many times they don't know how to go about it or who to tell." The Upfront series is designed to answer many of those questions.

Saks has already used video in training its people to detect and deter shoplifting. That module touches on some areas of customer service as well. "If you train your people in good customer service, you also get other benefits," Burger points out. "You'll get more sales; your stores will develop a better image. And," he emphasizes, "by teaching your salespeople to be more aware of customers—greet them, make eye contact—it will deter shoplifting."

Finally, credit fraud is rapidly earning a reputation as a formidable source of shrinkage. Stolen and fake credit cards, which have plagued retailers for years, are only part of the problem—the pervasive use of credit cards coupled with more relaxed returns policies is resulting in widespread fraudulent refunding.

"Why should a shoplifter sell the merchandise on the street for 25¢ on the dollar, when he can bring it back to the store and get 100¢ on the dollar?" asks Burger, summarizing a major part of the problem. In addition,

as cashiers and clerks become more savvy in operating computerized POS systems, they, too, have learned ways to manipulate refunding.

Saks recently caught an employee charging credits back to her credit card without buying or returning any merchandise. In her previous job, the former airline employee had learned how to write up returns without having a customer's name appear on the slip. If it hadn't been for another alert employee who recognized the credit card number from seeing it repeatedly, says Burger, her actions would have gone undetected.

In order to address fraudulent refunding, various companies have developed POS software that can tip off a retailer about the possibility of a refunding scam. Some systems are designed to flag employees who process an inordinate amount of refunds; others compile the names and addresses of customers returning merchandise. If a name or an address comes up repeatedly, the system will again alert the retailer.

While anti-credit fraud POS software is not new, its use is becoming more widespread as retailers install new or upgraded POS systems. ■

EXPERIMENT IS THE WATCHWORD TRYING DIFFERENT LIGHTS FOR DIFFERENT SITES

"Retailers have finally learned that no single type of interior lighting is appropriate for every application; these days, they're very much into testing different applications."

So says Bob Lindahl, divisional vp and director of buildings and properties for 39-unit Kohl's Department Stores.

According to sources contacted by *Chain Store Age Executive*, Lindahl is correct in his assessment. While they still have both energy savings and esthetics in mind, many retailers are experimenting with such lighting techniques as new fluorescent tubes, PL lamps, open-celled baffles and reflectors.

At the same time, other companies are devoting a great deal of attention to improving the color rendition of their accent lighting by performing trial runs with several varieties of low-voltage fixtures.

"In the not-too-distant past, stores were restricted to a choice between incandescent recessed lighting with

reflector floods or standard 2x4s," claims one engineer. "As a result, many were overlit or underlit. The available options simply weren't appropriate for their individual environments, either energy- or looks-wise. However, recent technological developments are allowing chains to break out of the old mold—either by experimenting with new lamps or by experimenting with the actual fixtures."

Associated Dry Goods is one of those retail concerns giving thought to trying out some lamp innovations, reports Richard Sundquist, ADG's director of engineering. For example, several of its Robinson's stores may soon be fitted with T8 fluorescent lighting sources for general illumination.

The T8s, which measure 1 in. in diameter and come in several color temperatures and tube sizes, feature a phosphor coating that allows them to emit a warm white glow. They can fit into electronic ballasts set up to control four lamps simultaneously.

Cost per square foot for interior lighting

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
Less than \$0.10	2	—	—	—	—	7	3
\$0.10-\$0.14	8	7	10	7	—	17	7
\$0.15-\$0.25	14	13	17	3	17	30	7
\$0.26-\$0.50	7	13	7	13	3	—	3
\$0.51-\$0.75	7	7	—	17	3	10	7
\$0.76-\$1.00	16	10	27	23	20	10	7
\$1.01-\$2.00	19	17	17	13	20	17	27
\$2.00 +	23	23	17	20	33	10	37
Contracted to outside services/handled by mall	1	3	3	—	—	—	—
Individual store handles	2	3	3	—	3	—	—
Don't know/no answer	2	3	—	3	—	—	3
(MEAN)	(\$1.16)	(\$1.17)	(\$1.04)	(\$1.11)	(\$1.42)	(\$0.74)	(\$1.50)

Source: Chain Store Age Executive research

Lifespan for interior lighting

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
4 years or less	9	17	3	7	3	17	7
5 years	8	—	7	3	10	17	13
6-9 years	10	7	7	23	7	10	7
10 years	23	17	27	27	13	23	33
11-14 years	2	3	—	3	3	—	3
15 years	15	13	20	17	20	10	10
16 years	1	—	—	3	—	—	—
20 years	16	30	30	7	20	7	3
More than 20 years	2	—	—	—	3	3	3
Handled by mall or outside supplier	1	3	—	—	—	—	—
Lifetime/permanent	8	10	7	7	10	10	7
Was never replaced	1	—	—	3	—	—	—
As needed/required	1	—	—	—	3	3	—
Don't know/no answer	4	—	—	—	7	3	13
(MEAN-years)	(11.7)	(12.6)	(13.5)	(10.5)	(13.3)	(10.1)	(9.9)

Source: Chain Store Age Executive research

"Basically, we're bringing in this kind of technology as a trial, to see whether it will give us more lighting 'miles to the gallon,'" Sundquist explains. "One advantage we're aware of is that these particular tubes operate with 32-watt bulbs rather than standard 40-watt models, with no discernible difference in the degree of brightness they provide."

"Should our test run true to form, the 32-watt reduction in each ballast (8 watts less per lamp) could make for a substantial monetary savings—

enough to make the products a standard for new store installations," he says.

Similarly, at one branch of a Midwestern specialty operation, twin-tubed fluorescent bulbs are currently being installed (retrofitted) into sockets formerly used for housing incandescent equipment. Generically termed "PL lamps," the replacement units operate on seven to 14 watts of power and are capable of producing the same kind of warm white overall light as the T8s.

Although the "PL experiment" is only a few months old, personnel at the chain's corporate headquarters are already deeming it a harbinger of changes to come. "Right after we put in these items last January, we had to admit that we had made a mistake when it came to choosing our regular lighting system," concedes its architectural director.

"We have 150-watt incandescent floodlights, which not only generate so much heat that they send our air-conditioning bill sky-high during the summer months, but also create too high a degree of glare in the selling areas."

"On the other hand," the director continues, "we're finding that since the wattage on the PLs is so much lower, the test site costs about 50% less to illuminate than do our outlets, is only half as hot and contains no harsh light spots."

Consequently, he states, the specialty operation plans to undertake the retrofitting process in all of its 40-plus stores at a rate of approximately 10 to 15 outlets monthly.

Also becoming popular, retailers say, is the practice of testing entirely new or reconfigured lighting fixtures, rather than just the lamps designed to go inside them.

A case in point is Claire's Boutiques which, as an alternative to traditional 2x4 housing, gradually acquired cube-shaped open fixtures called "baffles" for its 380 outlets. James Saum, director of store planning and construction, estimates that the square units have slashed Claire's lighting expenditures by approximately 25% since they were installed last year.

"The savings were apparent from the initial trial installation," he asserts. "While the 2x4s utilized four bulbs, the baffles needed only three, which is where energy conservation came in."

What's more, Saum adds, because the lamps placed inside the cubes were more deeply recessed than those inserted into 2x4s, any concern about "unattractive equipment protruding from the ceiling and detracting from the stores' appearance" was automatically eradicated.

"The improvements were so great that there was really no question about making the installation of baffles a company-wide policy," he observes.

In a different vein, Lindahl reveals, Kohl's is conducting two separate reflector technology trial runs at

its Waukesha and West Bend, Wis., branches for periods of 16 and 20 months, respectively. Two lamps have been removed from each of the outlets' four-lamp fluorescent fixtures and replaced with the mirrored objects.

"The reflectors give the illusion of twice as many bulbs, with half as much power, by bouncing the light you do have off a metallic strip," Lindahl notes. "At the same time, they disguise the empty sockets from which the bulbs have been taken, so it doesn't look like there are black holes in your ceiling."

"Although we haven't yet quantified the savings inherent in this alternative, we can say that we are pleased with it and are considering its use in other Kohl's locations."

Meantime, a number of chains are looking at innovative ways to pack punch into accent lighting while simultaneously improving color rendition. For instance, in conjunction with the T8 experiments being conducted in its new stores, ADG is pinpointing some display areas with low-voltage tungsten-halogen lamps. Originally developed for use on optical projection equipment, the items produce a color balance that comes close to mimicking sunlight.

According to Sundquist, the equipment works on a 90-watts-per-fixture allowance, compared with the 150 watts needed by other display lights. Nonetheless, it illuminates merchandise at approximately four to five times the ambient level achieved by older fixtures.

"The goods highlighted by these lamps look brighter and more like they are supposed to," Sundquist says. "Red is red, not pink; blue is blue, rather than a washed-out gray, and so on."

And, at Heck's discount stores, metal halide lamps with color temperatures of about 3000° Kelvin have been approved for use as a means of making checkout counters and surrounding sales areas stand out from other departments. The bulbs are suspended from the ceiling in housings called "luminaires."

"When we tried the halides, we found that they mixed well with the light in our ceilings, making the checkouts very obvious without producing too much glare," notes energy manager Ben Shew.

"After considering various strategies, we went ahead and put them in all our branches. Happily for us, we are pleased with the decision." ■

H. E. BUTT TESTS DRY AIR SYSTEM SUPERMARKETER SAVES ON COSTS AND EFFICIENCY

Store engineers are constantly probing new areas to improve their heating, ventilation and air-conditioning (HVAC) systems to improve efficiency and reduce overhead costs.

One of the retail companies that has been most active in HVAC testing is San Antonio, Tex.-based H. E. Butt, a 150-unit supermarket chain in the Southwest. Most recently the company completed a study with the Gas Research Institute on HVAC and

how cargo care systems could be utilized to build a desiccant-based HVAC system. This system is in use in 20 stores and will be in all new stores and all major remodels.

The system uses a fiberglass honeycomb wheel which is impregnated with lithium chloride to remove the moisture from the stores, explains Dean Calton, Butt's engineer.

The units provides sensible cooling, keeping the stores at 75°F and 40% relative humidity.

Cost per square foot for HVAC

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %
Less than \$0.10	7	3	3	7	3	20
\$0.10-\$0.14	2	7	—	3	—	—
\$0.15-\$0.25	9	7	7	7	10	13
\$0.26-\$0.50	7	10	7	3	7	10
\$0.51-\$0.75	7	7	—	10	7	10
\$0.76-\$1.00	5	3	7	3	10	3
\$1.01-\$2.00	19	23	20	20	17	17
\$2.00 +	37	33	40	47	37	27
Contract to outside service/handled by mall	1	3	—	—	3	—
Individual store handles	5	—	17	—	7	—
Don't know/no answer	1	3	—	—	—	—
(MEAN)	(\$1.44)	(\$1.41)	(\$1.68)	(\$1.59)	(\$1.49)	(\$1.08)

Source: Chain Store Age Executive research

Lifespan for HVAC

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %
5 years or less	5	—	3	—	3	17
6-9 years	6	—	3	7	3	17
10 years	17	20	17	27	3	17
11-14 years	5	13	3	—	3	3
15 years	28	30	23	47	23	17
16-19 years	1	—	3	—	3	—
20 years	22	20	20	13	37	20
More than 20 years	5	3	—	3	20	—
Lifetime/permanent	3	—	7	3	—	3
Was never replaced	1	—	—	—	3	—
As needed/required	3	7	7	—	—	—
Handled by outside supplier/mall	1	—	3	—	—	—
Don't know/no answer	3	7	10	—	—	7
(MEAN-years)	(14.9)	(15.0)	(14.4)	(14.3)	(19.1)	(11.6)

Source: Chain Store Age Executive research

The result: even though the air handler is more expensive than the traditional HVAC system, there is a cost savings in the installation of ducts because of reduced air flow requirements.

Because the quality of the air being delivered is drier, not as much air has to be delivered, and therefore the ductware is less expensive.

Also, the air-conditioner condenser units are smaller, resulting in reduced maintenance, installation and capital cost expenditures. This is because the system doesn't require overcooling to remove the water from the air. Generally, a store has to overcool to get the humidity down.

Thus far, it has saved H. E. Butt about 15% on installed costs. The system also performs about 7% more efficiently.

The real key item, says Calton, is that before the new system was installed, the chain couldn't control humidity in the stores. Now the stores are comfortable, and the product presentation is better: no frost on packages, no sweaty moisture on dairy products, and no fungus, a problem in coastal areas. "We've raised our store temperature and lowered the humidity. It had been 72°F and 55% to 60% relative humidity."

Also, says Calton, H. E. Butt is testing a new version which is still more efficient. It uses an evaporative cooler and heat exchanger. The air that comes off the desiccant wheel is very hot, but doesn't have any moisture. The system uses the evaporative cooler to cool the hot air, which results indirectly in about 17 tops of air-conditioning.

The system takes the air from outside of the store and passes it over a water sprayer and cools it down to about 75°F. The air then passes over the air-conditioning condenser that does the "sensible" cooling. It's then "exhausted" back into the outside air.

A portion of the returned air passes over the desiccant wheel which removes the moisture. It's an exothermic reaction (a type of chemical reaction where heat is the byproduct). The moisture is removed and the air is heated to about 115°F as a result of the moisture's being removed. The air then passes outside the heat exchanger, which has the cold wet air going through it, cooling it down to 80°F.

That air is passed over a DX (direct expansion) coil for final cooling. The amount of cooling is determined by the thermostat out in the store. ■

MICROS KEEP CONTROL AT HOME SOPHISTICATED SYSTEM TAKES OVER AT RALPHS

As computer hardware and software become more sophisticated and adaptable to specific tasks, retail chains are increasingly

managing and controlling their energy needs internally.

Ralphs, the supermarket division of Federated Department Stores that

Cost per square foot for energy management hardware and software

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
Less than \$0.10	17	20	30	10	13	23	7
\$0.10-\$0.14	6	3	3	—	—	3	23
\$0.15-\$0.25	17	20	13	13	27	17	10
\$0.26-\$0.50	17	23	3	23	23	20	7
\$0.51-\$0.75	5	3	7	—	13	3	3
\$0.76-\$1.00	6	3	3	20	—	3	7
\$1.01-\$2.00	4	—	7	10	7	—	—
\$2.00 +	6	—	7	10	7	3	10
Don't have energy management equipment	18	20	20	13	10	27	23
Contract to outside service/handled by mail	1	—	3	—	—	—	—
Individual store handles	2	—	3	—	—	—	7
Don't know/no answer	2	7	—	3	—	—	3
(MEAN)	(\$0.53)	(\$0.26)	(\$0.54)	(\$0.80)	(\$0.56)	(\$0.35)	(\$0.61)

Source: Chain Store Age Executive research

Lifespan for energy management hardware and software

	Total %	Discount %	Drug %	Supermarket %	Department %	Home Center %	Apparel Specialty %
4 years or less	7	7	7	7	3	7	10
5 years	11	7	17	10	10	8	13
6-9 years	10	7	7	23	10	7	7
10 years	24	33	23	30	17	30	10
11-14 years	2	—	7	—	3	—	—
15 years	7	13	3	3	13	—	7
More than 15 years	5	3	3	3	17	3	—
Lifetime/permanent	6	3	3	3	13	7	3
As needed/required	3	—	3	7	—	7	—
Just recently installed	2	3	3	3	3	—	—
Don't know/no answer	6	3	3	—	3	3	23
Don't have energy management hardware/software	17	20	20	10	7	27	23
Handled by outside supplier or mail	1	—	—	—	—	—	3
(MEAN-years)	(9.4)	(10.0)	(8.8)	(8.7)	(12.1)	(8.6)	(7.5)

Source: Chain Store Age Executive research

SMALL WONDER.

For only \$1665,* Paragon's new EC128 helps you keep elusive energy costs under control.

If you're not convinced that you need a building management system in your retail stores, take a look at your energy bill. Chances are it's full of wasted hours of lighting, heating or air conditioning that could be eliminated with the EC128. Here's what our small wonder can offer:

- 12 outputs, 8 analog or digital inputs
- 365-day scheduling
- Demand control
- Remote communications with auto-answer and alarm dial-out**
- Optimized temperature control
- Exclusive Astro-dial® lighting control
- Temperature and energy usage log
- Portable, plug-in Memory Storage Module for uploading or downloading of your program**

Find out about the affordable EC128. Call extension 3117 at Paragon today.



At \$1665,* the EC128 has more energy cost management capability per dollar than any other control on the market.

*Suggested list price. (Installation and options not included.)

**Optional features.

PARAGON ELECTRIC COMPANY, INC.
606 Parkway Blvd., P.O. Box 28, Two Rivers, WI 54241
414-793-1151 Fax 414-793-3736 Telex 26-3450

For more information circle 32 on reply card.

Is BUR making way for single-ply, metal or even newer roofing materials? Learn the answer in a special Roofing Update appearing in the August issue of CHAIN STORE AGE EXECUTIVE.

RETAIL CENSUS

operates more than 125 stores in southern California, is looking at a sophisticated control system for its refrigeration and HVAC that utilizes a microprocessor, according to Douglas Smith, vp-engineering and construction. This system has the capability of measuring case and product temperatures.

Going along with the use of electronic controls instead of electro-mechanical controls is Landover, Md.-based Giant Food, according to David N. Freedman, senior vp-corporate facilities.

The electro-mechanicals have controls that are "sloppy," he explains, but they are reliable. "We've traded reliability for precision."

Donald Mechlin, director of in-store engineering at Strawbridge & Clothier, Philadelphia, says that a new form of energy management controls called DDC (direct digital control) is replacing the widely-used pneumatic control.

This latter system has compressed air signals at each thermostat that, in turn, trigger or send out signals for changes.

The advantage of DDC is that it doesn't require maintenance. The person in charge can change the temperature points by sending out signals from the central computer.

Many chains, however, still use third parties to help evaluate energy. General Energy Technologies (GET) began offering its own Energy Conservation Analysis System (ECAS) after 10 years of doing nearly 2,000 energy audits for more than 500 companies, says David Farrell, president.

In the various GET systems, data and information is stored, accessed and reported in segments and elements most likely to be understood and acted upon by the users. The programs can all be run on any fully compatible IBM—PC, XT or AT.

GET computerized the techniques, the products and the logic that went into making its recommendations to its clients. The engineers made a data base for all these products and now they have a software program that does a comprehensive analysis for all energy applications.

The retailers can put into their microcomputers the program offered by GET. It breaks down the energy costs by item, such as lighting or HVAC. At any particular time, the chain can pull a report and know how much it is spending on energy or how much it is saving. The program costs \$995. ■

RETAILERS THROW BACKHAUL SYSTEMS IN THE TRASH CHAINS TAKE SEVERAL DIFFERENT APPROACHES TO SOLID WASTE DISPOSAL

Most retailers agree that handling solid waste can be a problem. However, there's little consensus among them as to what the actual solutions should be.

For example, consider the question of backhauling. While some companies have found this to be the best answer for how to handle paper waste, other retailers report being far from pleased with the results.

Fred Meyer is one of the retail

companies that have found backhauling doesn't work in its case.

Gary Wheeler, service division vp and corporate building supply maintenance manager, points out that "When you backhaul, you must be prepared to bale. That wasn't something we wanted to continue doing."

Yet, the company has 97 outlets that generate plenty of paper. That's why it has installed compactors with 30- to 40-cubic-foot bins in each

store. Commercial haulers take the bins to recycling facilities.

Similarly, Giant Eagle supermarkets tried instituting a backhauling program as an alternative to "piling up the corrugated and having it removed when it got too cumbersome," reports Richard Deane, director of maintenance for the company's Aetos subsidiary. Instead, he explains, backhauling proved more labor-intensive than had originally been anticipated because of the "extra" manpower required to load and unload the various conveyances. In addition, storage areas often became cramped waiting for pickups to be made. As a result, Giant Eagle has abandoned backhauling and instead now collects scrap cardboard at each store.

Meanwhile, in the area of wet waste management, retailers continue to disagree over the merits of using self-contained trash compactors in lieu of open bins.

At Giant Eagle, Deane says, company policy dictates that only the former be in evidence. Consequently any garbage that cannot be recycled is placed in 42-cubic-yard receptacles that are inseparable from the compressors themselves. With the boxes still intact, the compactors are collected by rubbish companies and taken to nearby landfills for dumping.

"Self-contained units are neater than open ones because you don't pull your mechanism apart until you get to the landfill, where spills and smells don't matter."

However, taking the opposite stand is a Midwestern supermarket group spokesman, who reports that his company had a "negative" experience with self-contained compressors leased for a test run in late 1985.

"We had always taken the trash from our compressors and put it in receptacles without lids, but we heard about the newer models and wanted to try them out. We put them in two branches, yet disliked the results."

That's because the bins "were usually returned from the landfill with garbage sticking to the side. The open bins sometimes present the same problem, but they are easier to clean when they are detached from the compressor. That may not be the typical case, but it was sufficient to prove that self-contained machines were not for us."

Cost per square foot for solid waste management

	Total %	Discount %	Supermarket %	Home Center %
Less than \$0.10	24	30	10	33
\$0.10-\$0.14	4	7	3	3
\$0.15-\$0.25	15	23	17	7
\$0.26-\$0.50	14	13	20	10
\$0.51-\$0.75	6	—	10	7
\$0.76-\$1.00	6	3	7	7
\$1.01-\$2.00	2	3	3	—
\$2.00 +	2	3	3	—
Don't have solid waste management equipment	10	3	13	13
Contract to outside service/handled by mail	9	10	7	10
Individual store handler	1	—	—	3
Don't know/no answer	6	3	7	7
(MEAN)	(\$0.37)	(\$0.34)	(\$0.51)	(\$0.20)

Source: Chain Store Age Executive research

Lifespan for solid waste management

	Total %	Discount %	Supermarket %	Home Center %
5 years	2	—	3	3
6-9 years	11	10	17	7
10 years	22	17	23	27
12 years	1	—	3	—
15 years	17	30	10	10
20 years	9	7	17	3
25 years	1	—	—	3
Lifetime/permanent	3	7	—	3
As needed/required	2	7	—	—
Handled by mail or outside supplier	13	13	10	17
Don't know/no answer	6	7	3	13
Don't have solid waste management systems	10	3	13	13
(MEAN-years)	(12.4)	(13.1)	(12.2)	(11.5)

Source: Chain Store Age Executive research